



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,663	09/25/2003	Heinrich Diepers	MUH-12749	8351
24131	7590	10/25/2005	EXAMINER	
LERNER AND GREENBERG, PA			BROWN, JAYME L	
P O BOX 2480			ART UNIT	PAPER NUMBER
HOLLYWOOD, FL 33022-2480			1733	

DATE MAILED: 10/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/670,663	DIEPERS ET AL.	
	Examiner	Art Unit	
	Jayne L. Brown	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 September 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) 5 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/25/03</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 9/25/03 has been considered by the examiner.

Claim Objections

2. Claim 5 is objected to because of the following informalities:

In line 3, "area" should be changed to - - areas - -.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 and 11-12 are rejected under 35 U.S.C. 103(a) as being obvious over Sezi et al. (U.S. Patent 6,787,244) in view of Lowack et al. (U.S. Pub. 2003/0176623).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claims 1 and 2, Sezi et al. teaches a method for bonding components, which comprises: preparing a first bond area on a first component, applying a poly-o-hydroxyamide on the first bond area, preparing a second bond area on a second component, applying the second bond area to the poly-o-hydroxyamide applied to the first bond area to produce an adhesive assembly, and heating the adhesive assembly to cyclicize the poly-o-hydroxyamide to a polybenzoxazole. Sezi et al. also teaches applying the poly-o-hydroxyamide to the second bond area to produce the adhesive assembly from the poly-o-hydroxymide-covered first bond area and the poly-o-hydroxyamide-covered second bond area (Column 12, lines 40-57; Column 15, lines 31-48; Column 16, lines 52-58).

Sezi et al. is silent toward the poly-o-hydroxyamide being of a general Formula I:

$$X - (Q)_n - (Z)_m - (A)_p - T - X$$

Lowack et al. is directed toward poly-o-hydroxyamides being cyclized to obtain polybenzoxazoles. Lowack et al. teaches using a poly-o-hydroxyamide of Formula I: $X - (Q)_n - (Z)_m - (A)_p - T - X$, which comprises of the same structures as the claimed formula (Abstract; Page 2, paragraph [0009] – Page 5, paragraph [0028]).

One skilled in the art would have readily appreciated using the poly-o-hydroxyamide Formula I of Lowack et al. since it is another conventional general formula for a poly-o-hydroxyamide. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the general Formula I suggested by Lowack et al. in the method of Sezi et al.

Regarding claim 3, Sezi et al. (Column 7, line 32) and Lowack et al. (Page 5, paragraph [0030]) both teach that R^1 is a trifluoromethyl radical.

Regarding claims 4 and 5, Sezi et al. teaches applying the poly-o-hydroxyamide in solution in a solvent to the first bond area and the second bond area (Column 12, lines 40-57; Column 13, lines 6-18).

Regarding claims 6 and 7, Sezi et al. and Lowack et al. are relied upon for the teachings above. Sezi et al. is silent towards adding a conductive material (carbon black) to the poly-o-hydroxyamide. One skilled in the art would have readily appreciated adding a conductive material in order to increase the conductivity of the poly-o-hydroxyamide, which would be useful in the semiconductor art. One skilled in the art would also have readily recognized that carbon black is a known and conventional conductive material. It would have been obvious to one of ordinary skill in

the art at the time the invention was made to add carbon black to the poly-o-hydroxyamide in the method of Sezi et al. as modified above.

Regarding claim 8, Sezi et al. (Column 12, lines 47-67) and Lowack et al. (Page 5, paragraph [0031]) both teach the poly-o-hydroxyamide being cyclized by heating the adhesive assembly to a temperature of more than 400°C.

Regarding claim 11, Sezi et al. and Lowack et al. are relied upon for the teachings above. Sezi et al. is silent toward bridging the adhesive assembly with a conductive paste. One skilled in the art would have readily appreciated using a conductive paste to reinforce the bond between the two components and to improve the conductivity (especially useful in the semiconductor art). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a conductive paste in the method of Sezi et al., as modified above.

Regarding claim 12, Sezi et al. teaches constructing the first and second components from different materials (Column 11, lines 23-58).

5. Claims 9-10 and 13-14 are rejected under 35 U.S.C. 103(a) as being obvious over Sezi et al. (U.S. Patent 6,787,244) in view of Lowack et al. (U.S. Pub. 2003/0176623), as applied to claims 1-8 and 11-12 above, and further in view of the Admitted Prior Art, Yamada et al. (U.S. Patent 5,694,673) and Tamagawa (U.S. Patent 5,773,923).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claims 9 and 10, Sezi et al. and Lowack et al. are relied upon for the teachings above. Sezi et al. is silent towards the adhesive assembly being heated under a reduced pressure that is less than one atmosphere. The admitted prior art teaches that it is a vacuum-tight bond between the components. One skilled in the art would have readily appreciated heating the adhesive assembly at a reduced pressure in order to obtain the vacuum-tight bond. One skilled in the art would also have recognized that having the reduced pressure be less than one atmosphere is a conventional practice. It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the adhesive assembly under a reduced

pressure in the method of Sezi et al., as modified above, as suggested by the admitted prior art.

Regarding claims 13 and 14, Sezi et al. and Lowack et al. are relied upon for the teachings above. Sezi et al. is silent toward the first and second components being formed by constituents of an X-ray image intensifier, the constituents being selected from the group consisting of vacuum vessel, input screen, support ring, insulator sleeve, anode support, and anode.

The admitted prior art teaches using adhesives to bond different components (the first and second components being made from different materials) such as various constituents of an X-ray image intensifier that are made of glass, metal, and ceramic.

It is known and conventional that constituents, such as a vacuum vessel, input screen, and support ring make up an X-ray image intensifier and are made of glass, metal, or ceramic as shown, for example, by Yamada et al. (Abstract) and Tamagawa (Column 1, lines 14-67). One skilled in the art would have readily appreciated bonding constituents of an X-ray image intensifier with the poly-o-hydroxyamide since the poly-o-hydroxyamide can be used to bond a variety of different materials and has temperature and chemical exposure stability (Sezi et al.: Column 11, line 23 – Column 12, line 8; Lowack et al.: Page 5, paragraph [0031]). It would have been obvious to one of ordinary skill in the art to have the components be formed by constituents of an X-ray image intensifier in the method of Sezi et al., as modified above, as suggested by the admitted prior art, Yamada et al., and Tamagawa.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jayme L. Brown whose telephone number is 571-272-8386. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jayme L. Brown

Jayme L. Brown



GLADYS J.P. CORCORAN
PRIMARY EXAMINER